

REMARKS

Claims 1 through 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. In particular, claim 1 is rejected due to the Examiner's belief that the term "urging" is indefinite and vague. Claims 1 through 4 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Liao (U.S. 6,371,398) in view of Mastrangelo (U.S. 6,405,961).

Claim 1 has been amended to more clearly and distinctly set forth the subject matter regarded as the invention and to more clearly distinguish Applicant's claimed structure from the prior art. In addition, claim 1 has been amended to meet Examiner's rejections based on 35 U.S.C. 112, second paragraph.

With respect to Examiner's rejections based upon 35 U.S.C. 112, it is believed that the Examiner has misread Applicant's claim 1. Examiner refers to the phrase "first wheel urging" and "second wheel urging". In actuality, Applicant uses the term urging as a verb referring to the actions of the first and second springs respectively. It is believed quite proper to refer to the action of a spring as "urging" a given component toward another or in a given direction. However, in the interest of moving forward with the present application, claim 1 has been amended to remove Applicant's use of the term urging and to describe the actions of the first and second springs in a different manner.

With respect to Examiner's rejections of claims 1 through 4 under 35 U.S.C. 103, Applicant respectfully requests that the Examiner consider the following remarks and arguments.

U.S. Patent 6,371,398 (Liao) sets forth a wire winding apparatus which is utilized in supporting a length of generally flat non-collapsible ribbon-like wire upon a pair of spools or reels. A rotating handle is coupled to a winding mechanism to allow the wire to be withdrawn into the winding box and supported upon the winding reels. Of particular interest with respect to the present invention are the following qualities of the disclosure of structure in Liao: The wire is flat and non-collapsible; a one-piece wire is used and distributed on two reels; and the portion of wire extending between the quantities on the two winding reels is clamped at the center between the reels.

U.S. Patent 6,405,961 (Mastrangelo) sets forth a storage assembly having a housing supporting a pair of rotatable reels upon which an elongated media such as fiber optic cable or the like is wound. The reels are separately movable and facilitate withdrawing the media from each reel. A coupling passage extends between the winding reels and is further coupled to a curved hollow connecting guide which functions to support the portion of the one-piece length of media which passes between the two reels. Mastrangelo is primarily directed to an elongated flexible member such as optical fiber or the like. However, in the description of the preferred embodiments at column 2, lines 2 through 8, reference is made to the ability of the structure to support other media including a hollow member such as flexible rubber or vinyl tubing.

It is believed that the ability of the structure of Mastrangelo to perform in the manner provided by the present invention structure is a critical issue in the examination of the present application. Accordingly, Examiner's attention is directed to column 2, lines 42 through 46 of Mastrangelo in which the structure described includes a passage 26 which passes through main body portion 24 and hubs 28. Further, Mastrangelo indicates that passage 26 defines a diameter "large enough to allow media 100 to pass through and rotate freely within passage 26".

Further, Mastrangelo recites at column 2, line 57 through column 3, line 20 that connection members 34 and passage 26 are merely a pass through between reels 32. Thus, connection members 34 are not actually connectors but rather comprise fixed hollow passages for guiding media 100 through the passages between reels. Thus, it is believed that the combination of connection members 34 and passage 26 are not comparable structures to Applicant's rotatable connector 85.

While Mastrangelo "suggests" using other media such as collapsible media and further suggests rubber or vinyl hollow tubing (column 1, line 57 through column 2, line 6), it is clear from careful examination of the structure of Mastrangelo and in particular the functioning of connection members 34 and passage 26 that indeed Mastrangelo will not perform in the manner required by the present invention. This is particularly clear in the event opposite direction rotation is utilized between the spools.

As set forth in Mastrangelo at column 4, lines 55 through 58, media 100 is subjected to an “axially twist” when the reels are rotated. Mastrangelo further states that some twist is encountered even with same direction rotation of the reels. Further, however, and of more importance with respect to the present invention, Mastrangelo further recites at column 4, line 58 through column 5, line 6 that the axial twist problem imposed upon media 100 is particularly severe when opposite direction rotation of the reels is employed.

This axial twist as clearly conceded in Mastrangelo is absolutely not acceptable for the operative environment in which Applicant’s inventive structure is employed. The flexible hollow plastic tubing utilized in Applicant’s structure is readily susceptible to “kinking” or otherwise restricting the interior passage thereof upon the application of axially twist as imposed by Mastrangelo. This problem is absolutely intolerable in restricting the flow of life giving gas such as oxygen or the like in the intended use of the present invention.

Applicant’s rotational coupler 85 and the use of two separate pieces of tubing having internal ends coupled solely through the rotational coupler prevent this potentially life threatening problem from arising. In Applicant’s structure, rotational coupler 85 facilitates the rotation of internal ends of the tubing pieces with respect to each other and avoids any axial twist upon the media such as occur in both Liao and Mastrangelo.

More specifically, Applicant’s specification at page 14, lines 19 through 26 describe each tube supporting wheel as being independently operable. Further, at page 14, lines 19 through 21

and page 18, lines 15 through 21, Applicant's specification clearly sets forth that coupler 85 makes this independent rotation possible and avoids any of the axial twisting of the tubing.

With specific attention to Examiner's assertion that Applicant's inventive structure is rendered unpatentable in view of the combination of Liao and Mastrangelo, it is believed that Examiner errs in this assertion. Clearly, Mastrangelo recognizes and discusses the problem of axial twist of the media in passing between reels. However, Mastrangelo teaches away from the present invention structure in that Mastrangelo proposes that the problem may be solved by enlarging the connection members and passage 26 therebetween. Thus, Mastrangelo faced with the same problem as inventive structure fails to direct or teach any indication which would lead one to Applicant's structure. On the contrary, Mastrangelo teaches away from the inventive structure.

Thus, it is believed that Applicant's structure as set forth in claims 1 through 4 and particularly claim 1 amended herein is clearly distinguished from any combination of Liao and Mastrangelo. In particular, it is believed that Applicant's use of two separate segments of tubing media rather than the single segment used by Liao and Mastrangelo together with Applicant's use of a rotational coupler between internal tubing ends rather than the crossover portion of the single media segment presented by Liao and Mastrangelo clearly distinguishes Applicant's claimed invention from the prior art.

It is believed in view of the foregoing remarks and claim amendments that Applicant's claims 1 through 4 set forth patentable subject matter and allowance thereof is respectfully requested.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'R. Ekstrand', with a stylized flourish at the end.

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